



# INSTRUCTIONS

-J04779

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## SCREAMIN' EAGLE PRO STAGE II PERFORMANCE KIT

### GENERAL

#### Kit Number

30076-09

#### Models

This kit is designed to fit 2008 and later V-Rod model motorcycles.

#### NOTE

*The kit is intended for High Performance applications only. Engine related performance parts are intended for the experienced rider only.*

#### Additional Parts Required

Valve shims; see a Harley-Davidson dealer for selection:

Shims 1.825mm through 3.000mm, available from a Harley-Davidson dealer.

Shims larger than 3.000mm available from sources like [www.hotcamsinc.com](http://www.hotcamsinc.com)

SuperTuner recalibration for the ECM. See a Harley-Davidson Dealer for your model year.

Each service manual or supplement procedure will require special tools. These tools are called out in the service manual or supplement and are available through the SPX Kent-Moore Special Service Tools catalog.

### WARNING

**The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)**

#### NOTE

*This instruction sheet references service manual information. A service manual for your model motorcycle is required for this installation and is available from a Harley-Davidson Dealer.*

### NOTICE

**You must recalibrate the ECM when installing this kit. Failure to properly recalibrate the ECM can result in severe engine damage. (00399b)**

ECM recalibration is required using a SuperTuner. Motorcycle must not be started until the recalibration is done. See a Harley-Davidson dealer.

#### Kit Contents

See Figure 1 and Table 1.

### Prepare the Motorcycle for Service

### WARNING

**To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)**

1. Remove the right side cover and the main fuse.
2. Follow service manual instructions to remove the airbox assembly.
3. Disconnect the battery, negative (-) cable first.

### INSTALLATION

#### NOTES

*The cam removal and installation procedure does not require the removal of the engine from the frame.*

*Follow the service manual valve lash procedures in the VRSC service manual.*

*Valve lash specifications will be found in the engine specifications section.*

1. Follow the service manual valve lash procedure to reposition the engine in the chassis.

### NOTICE

**Rotate engine toward front cylinder only. Do not rotate engine toward rear cylinder, as engine damage can result. (00409c)**

2. Remove the cams per the service manual procedure for adjusting the valve lash.
3. Install the new cams and check valve lash per service manual procedure.
4. Complete assembly per valve lash procedure.
5. Follow service manual procedure to time the cams to the cam drive.
6. Follow service manual procedures to verify the valve lash.
7. If required, use a copy of the Valve Lash Calculation Worksheet found in the Appendix of the service manual. Adjust the valve lash following service manual MAINTENANCE: VALVE LASH, **Verify Cam Timing**, and **Lash Adjustment**.
8. After verifying lash adjustment, install and tighten spark plugs to 17 ft-lbs (23 Nm).

Optional Airbox Modifications

- 1. Using service manual instructions, remove the airbox assembly. After removing the intake air temperature sensor (IAT) and grommet, discard the airbox top cover.
- 2. Using the right, left and front side airbox templates (see last page for templates), lay a template in place and prick-punch the center of the crosshairs. Use a 1 inch hole saw to drill the larger holes and a 17/32 inch drill bit for the IAT hole.
- 3. Clean lower airbox and install the airbox assembly, velocity stacks, air filter and cover according to service manual instructions.
- 4. Install IAT grommet and IAT to the airbox and connect the IAT harness.

Return the Motorcycle to Service

- 1. Install the main fuse and the right side cover.
- 2. Reconnect the battery, positive (+) cable first.

NOTE

Calibration can be supplied through any authorized Harley-Davidson dealer.

- 3. Before starting the engine, recalibrate the ECM.

NOTICE

When closing the seat, make sure the ignition switch is in the FUEL position. If the ignition switch is in any other position when the seat is closed, the seat latch mechanism could be damaged. (00196a)

- 4. Close the seat.

WARNING

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

Test Run Motorcycle

- 1. Test start engine. If the oil pressure indicator lamp illuminates, follow the service manual procedure to troubleshoot the problem.
- 2. If there is a rattle heard during engine start-up, follow service manual procedure to adjust the secondary cam chain.

SERVICE PARTS

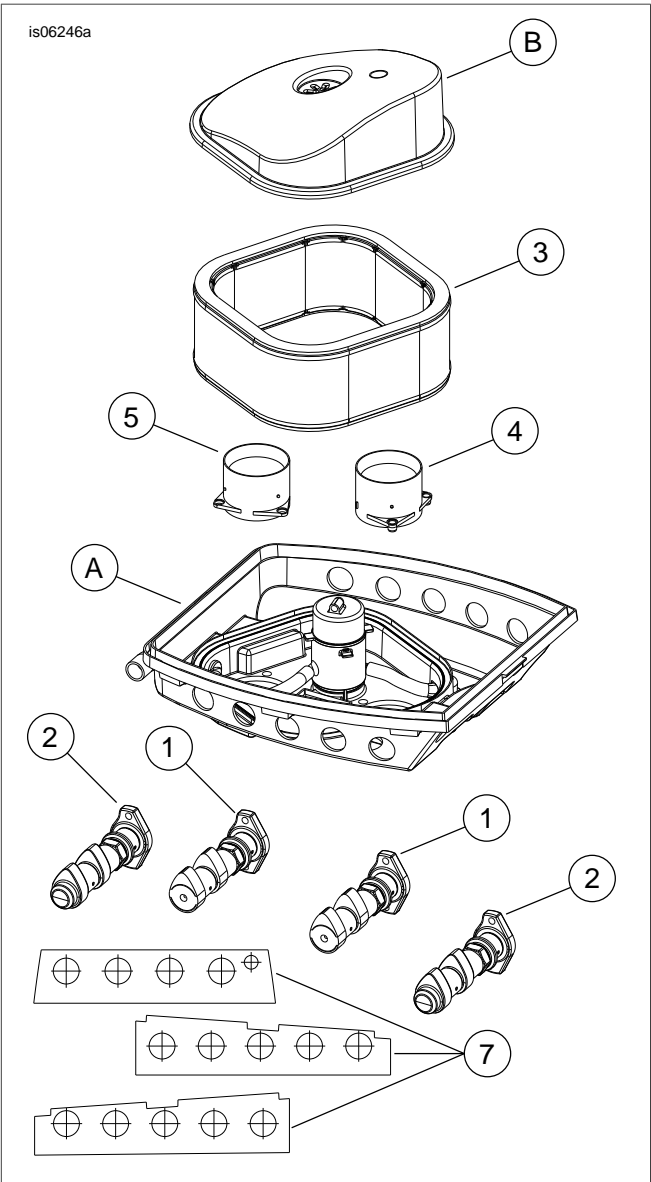


Figure 1. Service Parts: VRSC STAGE II PERFORMANCE KIT

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Camshaft assembly, intake (2)	17470-09
2	Camshaft assembly, exhaust (2)	17473-09
3	Air filter element	29793-02C
4	Front velocity stack	30078-09
5	Rear velocity stack	30079-09
6	Cam cover gasket kit (not shown)	17010-01K
7	Lower airbox drill templates (3)	Not Sold Separately
Items mentioned in text, but not included in kit.		
A	Lower airbox shown with template holes drilled	
B	Air filter element cover	